

## Quality Assurance and Performance Improvement (QAPI) in Healthcare for Older Adults: Fall Prevention

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**WHY:** Throughout the world one of the major health risks of older adults is falls. Falls are defined as an unintentional loss of balance that results in a position change and contact with the ground (CMS, 2011). To improve the quality of life of an older adult who has fallen, practitioners must know and understand the implications of falls and work to improve the quality of life of an older adult who has fallen.

The Centers for Disease Control and Prevention (CDC) (2017) and National Council on Aging (2017) report approximately one fourth of older adults over the age of 65 falls yearly. Falls in elderly individuals are the leading cause of non-fatal and fatal injuries. In 2014, emergency departments treated almost 2.8 million older adults who had suffered non-fatal falls resulting in 800,000 hospitalizations (Burns, Stevens, & Lee, 2016).

The CDC reports that the adjusted medical cost of falls in 2015 was approximately 31 billion dollars. With the aging population, it is expected that the number of falls will increase as well as the cost of treating falls (CDC, 2017). Within the last few years' death rates from falls have risen dramatically with 55% of unintentional injury deaths among adults aged 65 and over due to falls. Men have a higher death rate from falls than women and older white men are almost 10 times more likely to die from a fall than black men (Kramarow, Chen, Hedegaard, & Warner, 2015; Kochanek, Murphy, Xu, & Tejada-Vera, 2016).

**BEST APPROACH:** The best approach to decreasing falls or assessing fall risk is to perform a complete history and physical exam. Include a fall history: Is the fall an isolated event? If not, is there a pattern of falls, if there is a fall pattern, when and how often do falls occur and is there increased frequency of the falls? Is there a particular triggering factor or event to the fall? Is any alcohol consumed? Is there fear of falling?

What caused the fall? What activity was the person doing at the time of the fall? People who are arising from bed or off a toilet may die so quickly and, inadvertently, cause orthostatic hypotension. Did the fall involve exertion, change of position of the head (looking up, then down). Develop an assessment and monitoring plan.

### REFERENCES:

- Burns E., Stevens J., & Lee R. (2016). The direct costs of fatal and non-fatal falls among older adults—United States. *Journal of Safety Research*, 58, 99-103. doi: 10.1016/j.jsr.2016.05.001
- Centers for Disease Control and Prevention. (2017). Cost of Falls of Older Adults. Accessed April 1, 2017 from <http://www.cdc.gov/HomeandRecreationalSafety/Falls/fallcost.html>
- Centers for Disease Control and Prevention (CDC). (2017). Important Facts about Falls. Accessed April 1, 2017 from <https://www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html>
- Centers for Medicare Services (CMS). 2017. Accountable care organization 2017 Quality Measure Narrative Specifications. Retrieved from: <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/2017-Reporting-Year-Narrative-Specifications.pdf>
- National Council on Aging (NCA). Fall prevention facts. Accessed April 1, 2017 from <https://www.ncoa.org/news/resources-for-reporters/get-the-facts/falls-prevention-facts/>
- Kochanek K., Murphy S., Xu J. & Tejada-Vera B. (2016) Deaths: Final data for 2014. National vital statistics reports, Hyattsville, MD: National Center for Health Statistics, 65(4), 1-122. Available at: [https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65\\_04.pdf](https://www.cdc.gov/nchs/data/nvsr/nvsr65/nvsr65_04.pdf)
- Kramarow E, Chen L., Hedegaard H, & Warner M. (2015). Deaths from unintentional injury among adults aged 65 and over: United States, 2000–2013. NCHS data brief, no 199. Hyattsville, MD: National Center for Health Statistics. Available at: <https://www.cdc.gov/nchs/data/databriefs/db199.pdf>

### MORE ON THE TOPIC:

- Best practice information on care of older adults: <https://consultgeri.org/>
- CDC. Older Adult Falls: <https://www.cdc.gov/homeandrecreationalafety/falls/index.html>
- CDC. STEADI Initiative: <https://www.cdc.gov/steady/>
- National Council on Aging. Falls Prevention: <https://www.ncoa.org/healthy-aging/falls-prevention/>
- Nurses Improving Care for Healthsystem Elders (NICHE) Fall Assessment Open Resources: <http://www.nicheprogram.org/knowledge-center/open-resources/caregiver-tools/preventing-falls/>

## Implementing the Plan Do Study Act Model (PDSA) for Performance Improvement related to Fall Prevention

**Plan:** To improve the implementation of Fall Prevention Guidelines, select the appropriate interventions and identify indicators for evaluation.

Develop a monitoring tool, which includes assessment of the following:

- Aging-Increased age increases risk
- Gender-Women more at risk
- Medications
  - Benzodiazepines
  - Psychotropic agents
  - Sedatives
  - Diuretics
  - Vasodilators
  - Beta blockers
  - Antihypertensive agents
- Polypharmacy
- Assessment of balance
  - Prior falls (See Try This:<sup>®</sup> Hendrich II Fall Risk Model<sup>TM</sup>; Assessment of Fear of Falling in Older Adults)
  - Balance deficits
  - Gait deficits
- Cardiovascular assessment
  - Assess for arrhythmias
  - Postural vital signs
- Visual and hearing assessment
  - Presbyopia
  - Cataracts
  - Glaucoma
  - Macular degeneration
  - Presbycusis (See Try This:<sup>®</sup> Hearing Screening in Older Adults)
- Musculoskeletal assessment
  - Feet deformities – bunions, callus
  - Improper footwear
  - Muscle weakness/wasting/strength/tone
  - Arthritis
  - Activities of Daily Living (ADLs)
  - Mobility/gait testing
- Cognitive assessment
  - Mental status assessment (See Try This:<sup>®</sup> Mini-Cog<sup>TM</sup>; MoCA)
  - Depression (See Try This:<sup>®</sup> Geriatric Depression Scale)
  - Cognitive deficits
- Bowel and bladder assessment
  - Incontinence (See Try This:<sup>®</sup> Urinary Incontinence Assessment)
  - Constipation
  - Laxative use
- Environment
  - Lighting
  - Scattered rugs
  - Assistive devices

**Do:** Use fall assessment tools as part of a comprehensive fall prevention program. Conduct the review of implementation of clinical practice guidelines related to fall prevention. Document observations, including any problems and unexpected findings. Collect data identified as needed during the “plan” stage.

CDC, Stopping Elderly Accidents, Deaths, and Injuries (STEADI): Algorithm for Falls Risk Assessment and Interventions:

[https://www.cdc.gov/steady/pdf/algorithm\\_2015-04-a.pdf](https://www.cdc.gov/steady/pdf/algorithm_2015-04-a.pdf)

CDC, Stopping Elderly Accidents, Deaths, and Injuries (STEADI): Fall Risk Checklist:

[https://www.cdc.gov/steady/pdf/fall\\_risk\\_checklist-a.pdf](https://www.cdc.gov/steady/pdf/fall_risk_checklist-a.pdf)

**Study:** Collect the data; evaluate data for patterns and trends. Identify opportunities for improvement using statistical process control tools such as pareto charts, histograms and other graphs. Assemble a team of practitioners to help analyze data.

**Act:** Make any recommendations or modifications to ensure improvement and implementation of Clinical Practice Guideline interventions.